

FACILITY NAME AND PERMIT NUMBER:

Thornburg Community STP - VA0029513

Form Approved 1/14/99
OMB Number 2040-0086

BASIC APPLICATION INFORMATION

PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

A.1. Facility Information.

Facility name Thornburg Community STP

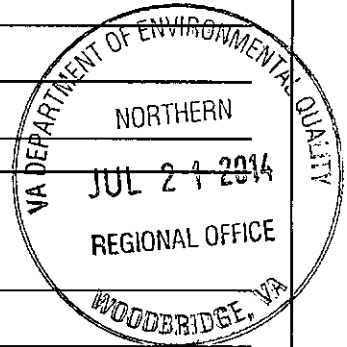
Mailing Address 10900 HCC Drive, Fredericksburg, Va. 22408

Contact person Doug Crooks

Title Division Director Wastewater Treatment

Telephone number (540) 507-7362

Facility Address 5225 Mud Tavern Road, Woodford, Va. 22580
(not P.O. Box)



A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name Spotsylvania County Utilities

Mailing Address 600 Hudgins Road, Fredericksburg, Va. 22408

Contact person Doug Crooks

Title Division Director Wastewater Treatment

Telephone number (540) 507-7362

*E3 Permitting
per CDS
Permitting review
7/28/2014*

Is the applicant the owner or operator (or both) of the treatment works?

☒ owner ☒ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

☐ facility ☒ applicant

A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES VA0029513 PSD _____

UIC _____ Other _____

RCRA _____ Other _____

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
	600	Separate	Municipal
Total population served		600	

Thornburg Community STP - VA0029513

Form Approved 1/14/99
OMB Number 2040-0086

Yes ☒ No

Yes ☒ No

	Two Years Ago	Last Year	This Year	
b. Annual average daily flow rate	0.046 ✓	0.070 ✓	0.099	mgd
c. Maximum daily flow rate	0.135	0.196	0.324	mgd

- | | | | |
|----------|-----------------------------------|-----|---|
| <u>✓</u> | Separate sanitary sewer | 100 | % |
| | Combined storm and sanitary sewer | | % |

- | | |
|--|---|
| i. Discharges of treated effluent | 1 |
| ii. Discharges of untreated or partially treated effluent | 0 |
| iii. Combined sewer overflow points | 0 |
| iv. Constructed emergency overflows (prior to the headworks) | 0 |
| v. Other | 0 |

- d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works? Yes ☒ No ☐

FACILITY NAME AND PERMIT NUMBER:Form Approved 1/14/99
OMB Number 2040-0086

Thornburg Community STP - VA0029513

If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

If transport is by a party other than the applicant, provide:

Transporter name: _____

Mailing Address: _____

Contact person: _____

Title: _____

Telephone number: _____

For each treatment works that receives this discharge, provide the following:

Name: _____

Mailing Address: _____

Contact person: _____

Title: _____

Telephone number: _____

If known, provide the NPDES permit number of the treatment works that receives this discharge. _____

Provide the average daily flow rate from the treatment works into the receiving facility. _____ mgd

- e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)? _____ Yes ☒ No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

Annual daily volume disposed of by this method: _____

Is disposal through this method _____ continuous or _____ intermittent?

FACILITY NAME AND PERMIT NUMBER:
Thornburg Community STP - VA0029513

Form Approved 1/14/99
OMB Number 2040-0086

WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9. Description of Outfall.

- a. Outfall number 001
- b. Location Thornburg 22580
 (City or town, if applicable) (Zip Code)
Spotsylvania Virginia
 (County) (State)
38 08 08 N 77 30 05 W
 (Latitude) (Longitude)
- c. Distance from shore (if applicable) N/A ft.
- d. Depth below surface (if applicable) N/A ft.
- e. Average daily flow rate 0.099 mgd
- f. Does this outfall have either an intermittent or a periodic discharge?
- _____ Yes ✓ No (go to A.9.g.)
- If yes, provide the following information:
- Number of times per year discharge occurs: _____
- Average duration of each discharge: _____
- Average flow per discharge: _____ mgd
- Months in which discharge occurs: _____
- g. Is outfall equipped with a diffuser? Yes ✓ No

A.10. Description of Receiving Waters.

- a. Name of receiving water Unnamed Tributary to Po River
- b. Name of watershed (if known) York River
- United States Soil Conservation Service 14-digit watershed code (if known): _____
- c. Name of State Management/River Basin (if known): _____
- United States Geological Survey 8-digit hydrologic cataloging unit code (if known): _____
- d. Critical low flow of receiving stream (if applicable):
acute 0 cfs chronic 0 cfs
- e. Total hardness of receiving stream at critical low flow (if applicable): _____ mg/l of CaCO₃

FACILITY NAME AND PERMIT NUMBER:

Thornburg Community STP - VA0029513

 Form Approved 1/14/99
 OMB Number 2040-0086

A.11. Description of Treatment.

- a. What levels of treatment are provided? Check all that apply.

☐ Primary ☒ Secondary
☒ Advanced ☐ Other. Describe: _____

- b. Indicate the following removal rates (as applicable):

Design BOD₅ removal or Design CBOD₅ removal 95 _____ %
 Design SS removal 95 _____ %
 Design P removal _____ %
 Design N removal _____ %
 Other _____ %

- c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

 If disinfection is by chlorination, is dechlorination used for this outfall? ☒ Yes ☐ No

- d. Does the treatment plant have post aeration?
- ☒
- Yes
- ☐
- No

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	6.8	s.u.			
pH (Maximum)	8.0	s.u.			
Flow Rate	0.324	MGD	0.099	MGD	365
Temperature (Winter)	10.2	C	8.1	C	365
Temperature (Summer)	25.0	C	11.3	C	365

* For pH please report a minimum and a maximum daily value

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		

CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.

BIOCHEMICAL OXYGEN DEMAND (Report one)	BOD-5	<QL	mg/l	<QL	mg/l	156	SM5210 B-11	2.0 mg/l
	CBOD-5							
FECAL COLIFORM		<QL	MPN	<QL	MPN	4	Colilert MPN	1 MPN
TOTAL SUSPENDED SOLIDS (TSS)		1.93	mg/l	0.11	mg/l	156	SM2540 D-11	1.0 mg/l

END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

Thornburg Community STP - VA0029513

Form Approved 1/14/99
OMB Number 2040-0086**BASIC APPLICATION INFORMATION****PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).**All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).**B.1. Inflow and Infiltration.** Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

<5,000 gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

None

B.2. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

- The area surrounding the treatment plant, including all unit processes.
- The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.
- Each well where wastewater from the treatment plant is injected underground.
- Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.
- Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.
- If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g. chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.**B.4. Operation/Maintenance Performed by Contractor(s).**Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ☐ Yes ☒ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: _____

Mailing Address: _____

Telephone Number: _____

Responsibilities of Contractor: _____

B.5. Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

- List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

None

- Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

☐ Yes ☐ No

FACILITY NAME AND PERMIT NUMBER:

Thornburg Community STP - VA0029513

Form Approved 1/14/99
OMB Number 2040-0086

- c. If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

- d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule MM / DD / YYYY	Actual Completion MM / DD / YYYY
- Begin construction	___/___/___	___/___/___
- End construction	___/___/___	___/___/___
- Begin discharge	___/___/___	___/___/___
- Attain operational level	___/___/___	___/___/___

- e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ☐ Yes ☐ No

Describe briefly: _____

B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: 001 _____

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)	0.97	mg/l	0.06	mg/l	156	SM184500-NH3F	0.1 mg/l
CHLORINE (TOTAL RESIDUAL, TRC)	<QL	mg/l	<QL	mg/l	1095	SM18 4500CL-G	0.2 mg/l
DISSOLVED OXYGEN	14.38	mg/l	9.82	mg/l	365	4500-OG	N/A
TOTAL KJELDAHL NITROGEN (TKN)	2.30	mg/l	1.0	mg/l	9	SM18 4500-NH3	0.1 mg/l
NITRATE PLUS NITRITE NITROGEN	42.95	mg/l	5.13	mg/l	12	SM18 4500NO3E	0.05 mg/l
OIL and GREASE	<QL	mg/l	<QL	mg/l	3	EPA1664A	5.0 mg/l
PHOSPHORUS (Total)	7.85	mg/l	2.97	mg/l	12	SM18 4500-P B	0.05
TOTAL DISSOLVED SOLIDS (TDS)	626	mg/l	529	mg/l	4	SM2540C	1 mg/l
OTHER							

END OF PART B.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

Thornburg Community STP - VA0029513

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OMB Number 2040-0086**BASIC APPLICATION INFORMATION****PART C. CERTIFICATION**

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:



Basic Application Information packet

Supplemental Application Information packet:

☐ Part D (Expanded Effluent Testing Data)☐ Part E (Toxicity Testing: Biomonitoring Data)☐ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)☐ Part G (Combined Sewer Systems)**ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title Edward Petrovitch - Director Public UtilitiesSignature Telephone number (540) 507-7300Date signed 7/16/14

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

VPDES SEWAGE SLUDGE PERMIT APPLICATION FORM

SCREENING INFORMATION

This application is divided into sections. Sections A pertain to all applicants. The applicability of Sections B, C and D depend on your facility's sewage sludge use or disposal practices. The information provided on this page will help you determine which sections to fill out.

1. All applicants must complete Section A (General Information).

2. Will this facility generate sewage sludge? ☒ Yes ☐ No

Will this facility derive a material from sewage sludge? ☐ Yes ☒ No

If you answered Yes to either, complete Section B (Generation Of Sewage Sludge Or Preparation Of A Material Derived From Sewage Sludge).

3. Will this facility apply sewage sludge to the land? ☐ Yes ☒ No

Will sewage sludge from this facility be applied to the land? ☐ Yes ☒ No

If you answered No to both questions above, skip Section C.

If you answered Yes to either, answer the following three questions:

a. Will the sewage sludge from this facility meet the ceiling concentrations, pollutant concentrations, Class A pathogen reduction requirements and one of the vector attraction reduction requirements 1-8, as identified in the instructions?
☐ Yes ☐ No

b. Will sewage sludge from this facility be placed in a bag or other container for sale or give-away for application to the land? ☐ Yes ☐ No

c. Will sewage sludge from this facility be sent to another facility for treatment or blending? ☐ Yes ☐ No

If you answered No to all three, complete Section C (Land Application Of Bulk Sewage Sludge).

If you answered Yes to a, b or c, skip Section C.

4. Do you own or operate a surface disposal site? ☐ Yes ☒ No

If Yes, complete Section D (Surface Disposal).

SECTION A. GENERAL INFORMATION

All applicants must complete this section.

1. Facility Information.
 - a. Facility name: Thornburg Community STP
 - b. Contact person: Doug Crooks
Title: Wastewater Treatment Division Director
Phone: (540) 507-7362
 - c. Mailing address: 10900 HCC Drive
Street or P.O. Box:
City or Town: Fredericksburg State: Va Zip: 22408
 - d. Facility location:
Street or Route #: 5225 Mud Tavern Rd.
County: Spotsylvania
City or Town: Fredericksburg State: Va Zip: 22580
 - e. Is this facility a Class I sludge management facility? Yes No
 - f. Facility design flow rate: 0.345 mgd
 - g. Total population served: 600
 - h. Indicate the type of facility:
☒ Publicly owned treatment works (POTW)
☐ Privately owned treatment works
☐ Federally owned treatment works
☐ Blending or treatment operation
☐ Surface disposal site
☐ Other (describe):
2. Applicant Information. If the applicant is different from the above, provide the following:
 - a. Applicant name: Spotsylvania County Utilities Department
 - b. Mailing address:
Street or P.O. Box: 600 Hudgins Rd.
City or Town: Fredericksburg State: Va Zip: 22408
 - c. Contact person: Ed Petrovitch
Title: Director Public Utilities

Phone: (540) 570-7302
 - d. Is the applicant the owner or operator (or both) of this facility?
☒ owner ☒ operator
 - e. Should correspondence regarding this permit be directed to the facility or the applicant? (Check one)
☐ facility ☒ applicant
3. Permit Information.
 - a. Facility's VPDES permit number (if applicable): VA0029513
 - b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices:
Permit Number: _____ Type of Permit: _____
None
4. Indian Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this facility occur in Indian Country? Yes ☒ No If yes, describe:

5. Topographic Map. Provide a topographic map or maps (or other appropriate maps if a topographic map is unavailable) that shows the following information. Maps should include the area one mile beyond all property boundaries of the facility:
- Location of all sewage sludge management facilities, including locations where sewage sludge is generated, stored, treated, or disposed.
 - Location of all wells, springs, and other surface water bodies listed in public records or otherwise known to the applicant within 1/4 mile of the property boundaries.
6. Line Drawing. Provide a line drawing and/or a narrative description that identifies all sewage sludge processes that will be employed during the term of the permit including all processes used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction.
7. Contractor Information. Are any operational or maintenance aspects of this facility related to sewage sludge generation, treatment, use or disposal the responsibility of a contractor? Yes X No
If yes, provide the following for each contractor (attach additional pages if necessary).
Name: _____
Mailing address: _____
Street or P.O. Box: _____
City or Town: _____ State: _____ Zip: _____
Phone: () _____
Contractor's Federal, State or Local Permit Number(s) applicable to this facility's sewage sludge: _____
- If the contractor is responsible for the use and/or disposal of the sewage sludge, provide a description of the service to be provided to the applicant and the respective obligations of the applicant and the contractor(s).
8. Pollutant Concentrations. Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants which limits in sewage sludge have been established in 9 VAC 25-31-10 et seq. for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old.

POLLUTANT	CONCENTRATION (mg/kg dry weight)	SAMPLE DATE	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
Arsenic	No Data Available			
Cadmium				
Chromium				
Copper				
Lead				
Mercury				
Molybdenum				
Nickel				
Selenium				
Zinc				

9. Certification. Read and submit the following certification statement with this application. Refer to the instructions to determine who is an officer for purposes of this certification. Indicate which parts of the application you have completed and are submitting:
- X Section A (General Information)
 X Section B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)
 Section C (Land Application of Bulk Sewage Sludge)
 Section D (Surface Disposal)

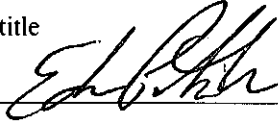
FACILITY NAME: Thornburg Community STP

VPDES PERMIT NUMBER: VA0029513

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title

Signature



Date Signed

2/14/14

Telephone number

Upon request of the department, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.

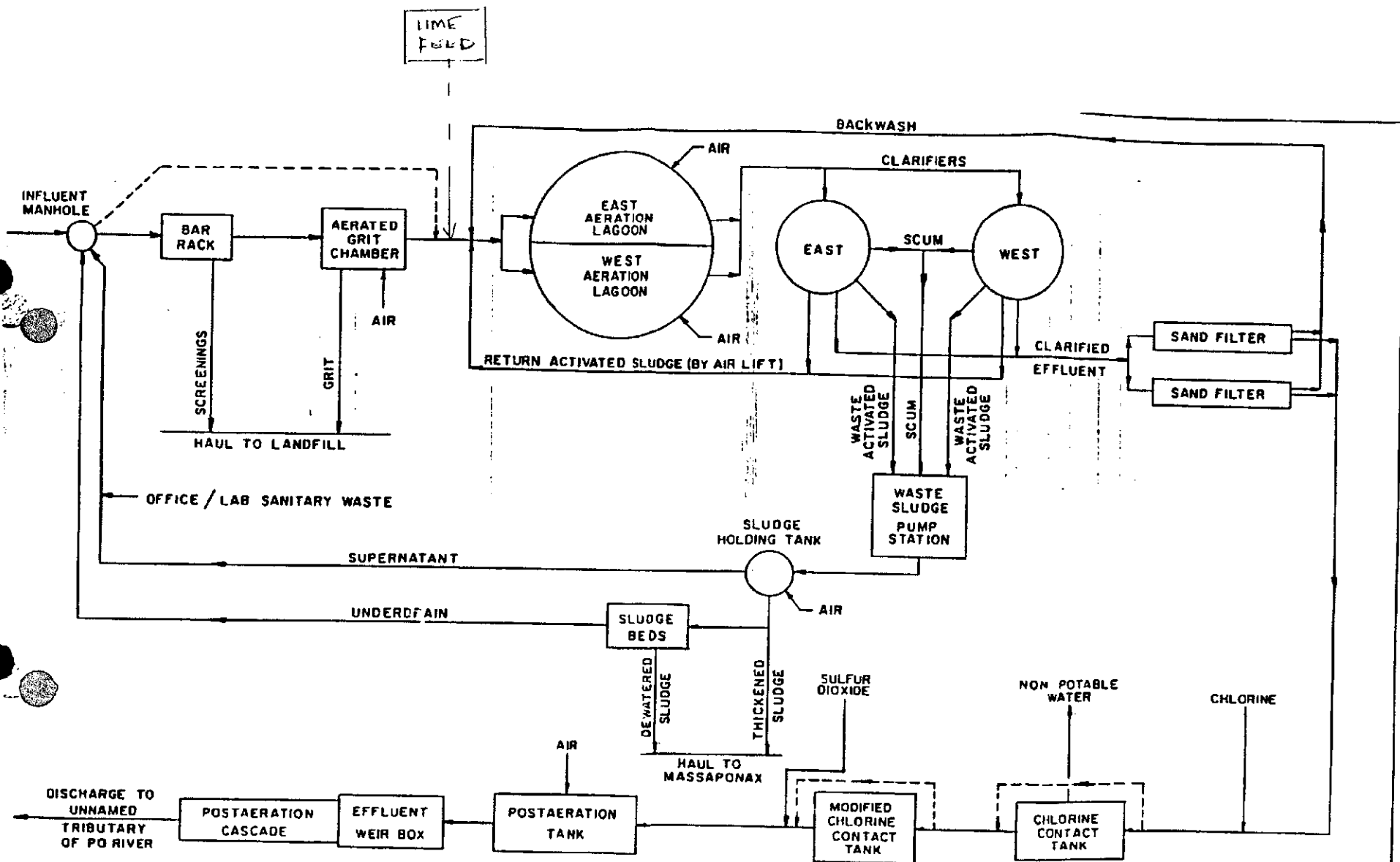


FIGURE 1.5-1
PROCESS FLOW DIAGRAM
THORNBURG
WASTEWATER TREATMENT PLANT
COUNTY OF SPOTSYLVANIA, VIRGINIA

**SECTION B. GENERATION OF SEWAGE SLUDGE OR PREPARATION
OF A MATERIAL DERIVED FROM SEWAGE SLUDGE**

Complete this section if your facility generates sewage sludge or derives a material from sewage sludge

1. Amount Generated On Site.
Total dry metric tons per 365-day period generated at your facility: 84 dry metric tons
2. Amount Received from Off Site. If your facility receives sewage sludge from another facility for treatment, use or disposal, provide the following information for each facility from which sewage sludge is received. If you receive sewage sludge from more than one facility, attach additional pages as necessary.
 - a. Facility name:
 - b. Contact Person:
Title:
Phone ()
 - c. Mailing address:
Street or P.O. Box:
City or Town: _____ State: _____ Zip: _____
 - d. Facility Address:
(not P.O. Box)
 - e. Total dry metric tons per 365-day period received from this facility: _____ dry metric tons
 - f. Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics:
3. Treatment Provided at Your Facility.
 - a. Which class of pathogen reduction is achieved for the sewage sludge at your facility?
Class A Class B X Neither or unknown
 - b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge: Aerated sludge storage
 - c. Which vector attraction reduction option is met for the sewage sludge at your facility?
Option 1 (Minimum 38 percent reduction in volatile solids)
Option 2 (Anaerobic process, with bench-scale demonstration)
Option 3 (Aerobic process, with bench-scale demonstration)
Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
Option 5 (Aerobic processes plus raised temperature)
Option 6 (Raise pH to 12 and retain at 11.5)
Option 7 (75 percent solids with no unstabilized solids)
Option 8 (90 percent solids with unstabilized solids)
X None or unknown
 - d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge: Aerated sludge storage
 - e. Describe, on this form or another sheet of paper, any other sewage sludge treatment activities, including blending, not identified in a - d above:
4. Preparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements and One of Vector Attraction Reduction Options 1-8 (EQ Sludge).
(If sewage sludge from your facility does not meet all of these criteria, skip Question 4.)
 - a. Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land:
_____ dry metric tons
 - b. Is sewage sludge subject to this section placed in bags or other containers for sale or give-away?

Yes No

5. Sale or Give-Away in a Bag or Other Container for Application to the Land.

(Complete this question if you place sewage sludge in a bag or other container for sale or give-away prior to land application. Skip this question if sewage sludge is covered in Question 4.)

- a. Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility for sale or give-away for application to the land: dry metric tons
- b. Attach, with this application, a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container for application to the land.

6. Shipment Off Site for Treatment or Blending.

(Complete this question if sewage sludge from your facility is sent to another facility that provides treatment or blending. This question does not apply to sewage sludge sent directly to a land application or surface disposal site. Skip this question if the sewage sludge is covered in Questions 4 or 5. If you send sewage sludge to more than one facility, attach additional sheets as necessary.)

- a. Receiving facility name: FMC WWTF
- b. Facility contact: Doug Crooks
Title: Wastewater Treatment Division Director
Phone: (540) 507-7362
- c. Mailing address:
Street or P.O. Box: 600 Hudgins Rd.
City or Town: Fredericksburg State: Va Zip: 22408
- d. Total dry metric tons per 365-day period of sewage sludge provided to receiving facility: 84 dry metric tons
- e. List, on this form or an attachment, the receiving facility's VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the receiving facility's sewage sludge use or disposal practices:
Permit Number: VA0068110 Type of Permit:

- f. Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility? Yes X No
Which class of pathogen reduction is achieved for the sewage sludge at the receiving facility?
 Class A Class B Neither or unknown
Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce pathogens in sewage sludge: Aerobic Digestion

- g. Does the receiving facility provide additional treatment to reduce vector attraction characteristics of the sewage sludge? Yes X No

Which vector attraction reduction option is met for the sewage sludge at the receiving facility?

- Option 1 (Minimum 38 percent reduction in volatile solids)
 Option 2 (Anaerobic process, with bench-scale demonstration)
 Option 3 (Aerobic process, with bench-scale demonstration)
 Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
 Option 5 (Aerobic processes plus raised temperature)
 Option 6 (Raise pH to 12 and retain at 11.5)
 Option 7 (75 percent solids with no unstabilized solids)
 Option 8 (90 percent solids with unstabilized solids)
 None unknown

Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge:

- h. Does the receiving facility provide any additional treatment or blending not identified in f or g above?
 Yes X No

If yes, describe, on this form or another sheet of paper, the treatment processes not identified in f or g above:

- i. If you answered yes to f., g or h above, attach a copy of any information you provide to the receiving facility to comply with the "notice and necessary information" requirement of 9 VAC 25-31-530.G.
- j. Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-away for application to the land? ☐ Yes ☒ No
If yes, provide a copy of all labels or notices that accompany the product being sold or given away.
- k. Will the sewage sludge be transported to the receiving facility in a truck-mounted watertight tank normally used for such purposes? ☒ Yes ☐ No. If no, provide description and specification on the vehicle used to transport the sewage sludge to the receiving facility.
Show the haul route(s) on a location map or briefly describe the haul route below and indicate the days of the week and the times of the day sewage sludge will be transported. Rt.606W to Rt. 1N, Rt. 1N to Rt.17E, Rt17E to Rt. 2W, Rt.2 W to Treatment facility. Monday thru Friday 0600 to 1600 hrs.

- j Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-away for application to the land? Yes XNo

- k. Will the sewage sludge be transported to the receiving facility in a truck-mounted watertight tank normally used for such purposes? X Yes No. If no, provide description and specification on the vehicle used to transport the sewage sludge to the receiving facility.

- k. Will the sewage sludge be transported to the receiving facility in a truck-mounted watertight tank normally used for such purposes? X Yes ___ No. If no, provide description and specification on the vehicle used to transport the sewage sludge to the receiving facility.

Show the haul route(s) on a location map or briefly describe the haul route below and indicate the days of the week and the times of the day sewage sludge will be transported. Rt.606W to Rt. 1N, Rt. 1N to Rt.17E, Rt17E to Rt. 2W, Rt.2 W to Treatment facility, Monday thru Friday 0600 to 1600 hrs.

7. Land Application of Bulk Sewage Sludge.

(Complete Question 7.a if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in Questions 4, 5 or 6; complete Question 7.b, c & d only if you are responsible for land application of sewage sludge.)

- a. Total dry metric tons per 365-day period of sewage sludge applied to all land application sites: _____ dry metric tons
- b. Do you identify all land application sites in Section C of this application? ☐ Yes ☐ No
If no, submit a copy of the Land Application Plan (LAP) with this application (LAP should be prepared in accordance with the instructions).
- c. Are any land application sites located in States other than Virginia? ☐ Yes ☐ No
If yes, describe, on this form or on another sheet of paper, how you notify the permitting authority for the States where the land application sites are located. Provide a copy of the notification.
- d. Attach a copy of any information you provide to the owner or lease holder of the land application sites to comply with the "notice and necessary" information requirement of 9 VAC 25-31-530 F and/or H (Examples may be obtained in Appendix IV).

- b. Do you identify all land application sites in Section C of this application? ☐ Yes ☐ No
If no, submit a copy of the Land Application Plan (LAP) with this application (LAP should be prepared in accordance with the instructions).

If no, submit a copy of the Land Application Plan (LAP) with this application (LAP should be prepared in accordance with the instructions).

- c. Are any land application sites located in States other than Virginia? ☐ Yes ☐ No
If yes, describe, on this form or on another sheet of paper, how you notify the permitting authority for the States where the land application sites are located. Provide a copy of the notification.

If yes, describe, on this form or on another sheet of paper, how you notify the permitting authority for the States where the land application sites are located. Provide a copy of the notification.

- d. Attach a copy of any information you provide to the owner or lease holder of the land application sites to comply with the “notice and necessary” information requirement of 9 VAC 25-31-530 F and/or H (Examples may be obtained in Appendix IV).

8. Surface Disposal.

(Complete Question 8 if sewage sludge from your facility is placed on a surface disposal site.)

- a. Total dry metric tons per 365-day period of sewage sludge from your facility placed on all surface disposal sites: _____ dry metric tons
- b. Do you own or operate all surface disposal sites to which you send sewage sludge for disposal?
____Yes ____No
- If no, answer questions c - g for each surface disposal site that you do not own or operate. If you send sewage sludge to more than one surface disposal site, attach additional pages as necessary.
- c. Site name or number:
- d. Contact person:
Title:
Phone: ()
Contact is: ____Site Owner ____Site operator
- e. Mailing address.
Street or P.O. Box:
City or Town: _____ State: _____ Zip: _____
- f. Total dry metric tons per 365-day period of sewage sludge from your facility placed on this surface disposal site: _____ dry metric tons
- g. List, on this form or an attachment, the surface disposal site VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the sewage sludge use or disposal practices at the surface disposal site:

- b. Do you own or operate all surface disposal sites to which you send sewage sludge for disposal?
 ___Yes ___No

If no, answer questions c - g for each surface disposal site that you do not own or operate. If you send sewage sludge to more than one surface disposal site, attach additional pages as necessary.

- c. Site name or number:

- d. **Contact person:**

Title:

Phone: ()

Contact is: Site Owner Site operator

- e. Mailing address.

Street or P.O. Box:

City or Town: _____ State: _____ Zip: _____

- f. Total dry metric tons per 365-day period of sewage sludge from your facility placed on this surface disposal site: _____ dry metric tons

- g. List, on this form or an attachment, the surface disposal site VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the sewage sludge use or disposal practices at the surface disposal site:

Permit Number:

Type of Permit:

VPDES Permit Application Addendum

1. **Entity to whom the permit is to be issued:** Spotsylvania County

Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.

2. **Is this facility located within city or town boundaries?** Yes ☐ No ☒

3. **Provide the tax map parcel number for the land where the discharge is located.** 63(1)B

4. **For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities?** None

5. **What is the design average effluent flow of this facility?** 0.0345 MGD

For industrial facilities, provide the max. 30-day average production level, include units:

In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? Yes ☐ No ☒

If "Yes", please identify the other flow tiers (in MGD) or production levels:

Please consider the following questions for both the flow tiers and the production levels (if applicable): Do you plan to expand operations during the next five years? Is your facility's design flow considerably greater than your current flow?

6. **Nature of operations generating wastewater:**

Municipal Wastewater

90 % of flow from domestic connections/sources

Number of private residences to be served by the treatment works: _____

10 % of flow from non-domestic connections/sources

7. **Mode of discharge:** ☒ Continuous ☐ Intermittent ☐ Seasonal

Describe frequency and duration of intermittent or seasonal discharges:

8. **Identify the characteristics of the receiving stream at the point just above the facility's discharge point:**

☐ Permanent stream, never dry

☒ Intermittent stream, usually flowing, sometimes dry

☐ Ephemeral stream, wet-weather flow, often dry

☐ Effluent-dependent stream, usually or always dry without effluent flow

☐ Lake or pond at or below the discharge point

☐ Other: _____

9. **Approval Date(s):**

O & M Manual Feb. 2010

Sludge/Solids Management Plan Feb. 2010

Have there been any changes in your operations or procedures since the above approval dates? Yes ☐ No ☒

Westernik, Anna (DEQ)

From: Doug Crooks [DCrooks@Spotsylvania.va.us]
Sent: Thursday, July 31, 2014 12:38 PM
To: Westernik, Anna (DEQ)
Subject: RE: Thornburg Community STP Permit Applicatio 7.21.14

1. EColi – Period of May 7 -13, 2014
TDS – Period of May 7 -13, 2014
O&G – Period of May 19 -21, 2014
All other non-permit required parameters were tested for monthly. We used the data generated in February, March & April 2014 in preparation of the application.
2. Are you asking me to resubmit?

From: Westernik, Anna (DEQ) [mailto:Anna.Westernik@deq.virginia.gov]
Sent: Monday, July 28, 2014 11:17 AM
To: Doug Crooks
Subject: Thornburg Community STP Permit Applicatio 7.21.14

Doug,

I have reviewed the permit application. Could you please address the following:

1. Could you provide monitoring dates for parameters not sampled under the permit.
2. The average design flow on the VPDES Permit Application Addendum should be 0.345 MGD.

Anna

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This email was Virus checked by UTM 9. <http://www.sophos.com>